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REPORT NO. 5

Cotton Fiber and Processing Test Results

HIUP OF





Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE
Memphis, Tenn. 38122 October 11, 1974

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1974

Discussion of Test Results

Cotton Division laboratories of the Agricultural Marketing Service report short staple average fiber length from the Southwest to be shorter and less uniform than a year ago. Cottons are finer and fiber strength is stronger at zero gage tests. Shirley Analyzer nonlint content is lower than a year ago. Yarns spun from these samples show yarn strength to be weaker. Yarn appearance grades are lower. Yarn imperfections are fewer than a year ago.

Medium staple samples tested from the Southwest show cotton fibers to be finer and stronger than a year ago at this stage of the harvest. Picker and card waste is higher than a year ago. Yarns spun from these samples show lower appearance grades than a year ago. Yarn imperfections are fewer.

These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season.— These reports are available on request from the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN 38122.

^{1/} Summary of Cotton Fiber and Processing Test Results, Crop of 1973, USDA, AMS, Cotton Division, May 1974.

Averages of fiber and processing tests from selected gin points in the United States through October 4, 1974

Table 1. -- Cotton:

		Spin. Potent.	Yarn No.	77 77	99					m
	Processing test results	perf-	No. Yarn	22 17	24 19					a
			Index	110	99		,			5
		Yar Skein str.	Lbs. 22s	101	99					4(22s)
		P&C waste	Pct.	4.9	7. 7. 9. 8.				-	0.5
		S A nonlint	Pct.	4. 8. 7.	4.8					0.5
		strength 1/8" gage	G/tex	ដ ដ	83 83					1
	er test results	Fiber Zero gage	Mpsi	88	80 84			,		α
		Mike fine- ness	Rdg.	₹ 0.	4.5					0.2
Ę.	Fiber	Fibrograph .5% 50/2.5 pan unif.	Pct.	††† 	, 45 45					a
		Fibro 2.5% span	Inches	1.01	1.08	-				0.02
		Lots tested	No.	98	18 27					
		Staple group Area, and Crop year		Short Staple: Southwest 1973 1974	Medium Staple: Southwest 1973 1974					 Significant dif- ference 2/

Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples. Based on a limited number of samples of modal quality الوال

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1974

	Spin. Poten-		N S		52	36
	Imprfect'ns Spin.	Yel Waste 8s or 22s or 8s or 22s or 8s or 22sor 74 tx 27 tx	외		56	23
farns	Impr	8s o 74 t:	일		45	80 32 23
Processing Test Results - Carded Yarns	Appearance Index	22sor 27 tx	욁		100 42 26	80
ults -	Appea Ind	8s or 74 tx	S		120	120
Pest Res	Elongation	22s or 27 tx	Pct Pct		4.9	5.4
ssing	Elone	8s or 74 tx	Pet		95 PERCENT 315 105 6.8	95 PERCENT 275 84 6.4
Proce	ıgth	22s or 27 tx	Lbs		95 PERCENT 105 6.8	95 PERCENT 84 6.
	Strength	8s or 74 tx	Lbs		315	275
	Elon- S.A. Color gat'n Non- Raw Stock P & C	Waste	Pct		4 7.3	4 6.6
	Color Raw Stock	Yel	Pct No No			
	Raw	Gra	위		Ŋ	4
	S.A.	lint Gra	Pct		5.3	3.3
lts	Elon- S.A.	1/8"	Pet		. LX 571 5.8 5.3	ANKART LX 571 17 5.6 3.3
Test Results		1/8" Gage	G/tex		LANKART LX 571 22 5.8	LANKART LX 571 17 5.6
Fiber	Fiber Strength	Zero Gage	Mpsi		92	87
	M: R		Rdg		4.	3.6
	Digital Ibrograph	Unif	Pct		45	45
	Digital Fibrograph	2.5% span	되		1.03	0.91
		Stple	32s	AREA	33	31.
Area,	ber			۵	52	45
Production Area,	& Sample Number	No Grade Name & Code		SOUTHWEST	CENTRAL TEXAS WACO 3 LM LT SP 52 33 1.03	WAXAHACHIE 2 SLM LT SP 42 31, 0.91

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1974

	l e	-n-					
	Spin. Poten-		외		54	57	36
	Imprfect'ns	50s 01	을 		22	15	29
arns		22s or	원		60 27 22	70 16	6C 34 29
rrded Y	Appearance	50s or	SI SI		09	70	29
Processing Test Results - Carded Yarns		Waste 22s or 50s or 22s or 50s or 22s or 50s or 22s or 50s or 27 tx 12 t	의 의		70	- 06	7.0
Pest Resi	Strength Elongation	r 50s or	Pet		3.5	4.0	10C PERCENT 65 18 4.2 3.8
ssing 1		22s oj	Pct		95 PERCENT 89 25 5.5	10C PERCENT 91 28 5.6	ENT 4.2
Proce		50s or	rps rps		PEKC 25	10C PERCENT	10C PERCENT 5 18 4.2
		22s or 27 tx	rps		95	100	100
	P & C	Waste	Pct		J.9	4.9	80 •
	S.A. Raw Stock P & C	Yel	No No No No		7.9 4	7	4 3 8.0
		Non- Lint Gra Yel	위		4	, m	
	S.A.	Non- Lint	Pct		3.9	٠ •	ري د
ts	Elon-	gat'n 1/8"	Pet		TONEVILLE 213	NE 16 7.2	SP37 5.7
Fiber Test Results	er gth	1/8" Gage	G/tex		STONEVILLE 213 21 6.1	DELTÄPINE 16 22 7.2	TAMCOT SP37
iber Te	Fiber Strength	Zero Gage	Mpsi		83	5	36
		Mike	Rdg		٠.	4.6	3.4
	al graph	Unif.	Pet		43	44	41
	Digital Fibrograph	Stple 2.5% span	티		52 34 1.06	35. 1.12	31 6.94
F-98*	. 6 -	Stple	32s	AREA	34	35.	3.1
Area,	I			A		41	52
Production Area, Classification	Sample Number	No Grade Name & Code		SOUTHWEST	CENTRAL TEXAS BATESVILLE 3 LM LT SP	NAVASCTA 1 SLM	WHITNEY 2 LM LT SP